Amdt/F

SEQUENCE LISTING

<110> Altmann, Friedrich

<120> Fucosyl Transferase Gene

<130> 030560-057

<140> US 09/913,858
<141> 2001-08-20

F1

<150> PCT/AT00/00040
<151> 2000-02-17

<150> AT A 270/99
<151> 1999-02-18

<160> 31

<170> PatentIn version 3.1

<210> 1

<211> 2198
<212> DNA
<213> Unknown Organism

<220>
<223> Description of Unknown Organism:plant

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ttcttccaat cccttgttgc tggaactgtc cctgtggttg ttggtgctcc aaatattcag 1140
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<210> 2
<211> 510
<212> PRT
<213> Unknown Organism

<220>
<223> Description of Unknown Organism:plant

<400> 2

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  1               5                  10                  15

Gln Gln Asp Ser Leu Pro Val Leu Ala Pro Gly Gly Asn Pro Lys Arg
             20                  25                  30

Lys Trp Ser Asn Leu Met Pro Leu Val Val Ala Leu Val Val Ile Ala
         35                  40                  45

Glu Ile Ala Phe Leu Gly Arg Leu Asp Met Ala Lys Asn Ala Ala Met
     50                  55                  60

Val Asp Ser Leu Ala Asp Phe Phe Tyr Arg Ser Arg Ala Val Val Glu
 65                  70                  75                  80

Gly Asp Asp Leu Gly Leu Gly Leu Val Ala Ser Asp Arg Asn Ser Glu
                 85                  90                  95

Ser Tyr Ser Cys Glu Glu Trp Leu Glu Arg Glu Asp Ala Val Thr Tyr
            100                 105                 110

Ser Arg Gly Phe Ser Lys Glu Pro Ile Phe Val Ser Gly Ala Asp Gln
        115                 120                 125

Glu Trp Lys Ser Cys Ser Val Gly Cys Lys Phe Gly Phe Ser Gly Asp
    130                 135                 140

Arg Lys Pro Asp Ala Ala Phe Gly Leu Pro Gln Pro Ser Gly Thr Ala
145                 150                 155                 160

Ser Ile Leu Arg Ser Met Glu Ser Ala Glu Tyr Tyr Ala Glu Asn Asn
                165                 170                 175

Ile Ala Met Ala Arg Arg Arg Gly Tyr Asn Ile Val Met Thr Thr Ser
            180                 185                 190

Leu Ser Ser Asp Val Pro Val Gly Tyr Phe Ser Trp Ala Glu Tyr Asp
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        195                 200                 205

Met Met Ala Pro Val Gln Pro Lys Thr Glu Ala Ala Leu Ala Ala Ala
    210                 215                 220

Phe Ile Ser Asn Cys Gly Ala Arg Asn Phe Arg Leu Gln Ala Leu Glu
225                 230                 235                 240

Ala Leu Glu Lys Ser Asn Ile Lys Ile Asp Ser Tyr Gly Gly Cys His
                245                 250                 255

Arg Asn Arg Asp Gly Arg Val Asn Lys Val Glu Ala Leu Lys His Tyr
            260                 265                 270

Lys Phe Ser Leu Ala Phe Glu Asn Ser Asn Glu Glu Asp Tyr Val Thr
        275                 280                 285

Glu Lys Phe Phe Gln Ser Leu Val Ala Gly Thr Val Pro Val Val Val
    290                 295                 300

Gly Ala Pro Asn Ile Gln Asp Phe Ala Pro Ser Pro Gly Ser Ile Leu
305                 310                 315                 320

His Ile Lys Glu Ile Glu Asp Val Glu Ser Val Ala Lys Thr Met Arg
                325                 330                 335

Tyr Leu Ala Glu Asn Pro Glu Ala Tyr Asn Gln Ser Leu Arg Trp Lys
            340                 345                 350

Tyr Glu Gly Pro Ser Asp Ser Phe Lys Ala Leu Val Asp Met Ala Ala
        355                 360                 365

Val His Ser Ser Cys Arg Leu Cys Ile His Leu Ala Thr Val Ser Arg
    370                 375                 380

Glu Lys Glu Glu Asn Asn Pro Ser Leu Lys Arg Arg Pro Cys Lys Cys
385                 390                 395                 400

Thr Arg Gly Pro Glu Thr Val Tyr His Ile Tyr Val Arg Glu Arg Gly
                405                 410                 415

Arg Phe Glu Met Glu Ser Ile Tyr Leu Arg Ser Ser Asn Leu Thr Leu
            420                 425                 430

Asn Ala Val Lys Ala Ala Val Val Leu Lys Phe Thr Ser Leu Asn Leu
        435                 440                 445

Val Pro Val Trp Lys Thr Glu Arg Pro Glu Val Ile Arg Gly Gly Ser
    450                 455                 460

Ala Leu Lys Leu Tyr Lys Ile Tyr Pro Ile Gly Leu Thr Gln Arg Gln
465                 470                 475                 480

Ala Leu Tyr Thr Phe Ser Phe Lys Gly Asp Ala Asp Phe Arg Ser His
                485                 490                 495

Leu Glu Asn Asn Pro Cys Ala Lys Phe Glu Val Ile Phe Val
            500                 505                 510
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<210> 3
<211> 105
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: GlcNAc-alpha1,3-fucosyl

<400> 3
gaagccctga agcactacaa atttagctta gcgtttgaaa attcgaatga ggaagattat 60
gtaactgaaa aattcttcca atcccttgtt gctggaactg tccct 105

<210> 4
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Mung bean

<400> 4
Glu Ala Leu Lys His Tyr Lys Phe Ser Leu Ala Phe Glu Asn Ser Asn
1 5 10 15

Glu Glu Asp Tyr Val Thr Glu Lys Phe Phe Gln Ser Leu Val Ala Gly
20 25 30

Thr Val Pro
35

<210> 5
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:n-terminal sequence
of tryptic peptide

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> Xaa = any amino acid

<400> 5

Lys Pro Asp Ala Xaa Phe Gly Leu Pro Gln Pro Ser Thr Ala Ser
1 5 10 15

<210> 6
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:n-terminal sequence
of tryptic peptide

<400> 6
Pro Glu Thr Val Tyr His Ile Tyr Val Arg
1 5 10

<210> 7
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:n-terminal sequence
of tryptic peptide

<400> 7
Met Glu Ser Ala Glu Tyr Tyr Ala Glu Asn Asn Ile Ala
1 5 10

<210> 8
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:n-terminal sequence
of tryptic peptide

<400> 8
Gly Arg Phe Glu Met Glu Ser Ile Tyr Leu
1 5 10

<210> 9
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
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<222> (3)..(15)
<223> n = any nucleotide

<400> 9
gcngartayt aygcngaraa yaayathgc 29

<210> 10
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
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<222> (14)..(17)
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<400> 10
crtadatrtg rtanacngty tc 22

<210> 11
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<220>
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<222> (6)..(6)
<223> n = any nucleotide

<400> 11
tadatnswyt ccatytcraa 20

<210> 12
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<400> 12
ctggaactgt ccctgtggtt 20

<210> 13
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<400> 13
agtgcactag agggccagaa 20

<210> 14
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<400> 14
ttcgagcacc acaattggaa at 22

<210> 15
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<400> 15
gaatgcaaag acggcacgat gaat 24

<210> 16
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<400> 16
cggcggatcc gcaattgaat gatg 24

<210> 17
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer

<400> 17
ccggctgcag taccatttag cgcat 25

<210> 18
<211> 35
<212> PRT
<213> Mung Bean

<400> 18
Glu Ala Leu Lys His Tyr Lys Phe Ser Leu Ala Phe Glu Asn Ser Asn
1 5 10 15
Glu Glu Asp Tyr Val Thr Glu Lys Phe Phe Gln Ser Leu Val Ala Gly
20 25 30
Thr Val Pro
35

<210> 19
<211> 36
<212> PRT
<213> Homo sapiens

<400> 19
Glu Thr Leu Ser Arg Tyr Lys Phe Tyr Leu Ala Phe Glu Asn Ser Leu

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His Pro Asp Tyr Ile Thr Glu Lys Leu Trp Arg Asn Ala Leu Glu Ala
            20                  25                  30
Trp Ala Val Pro
        35
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<210> 20
<211> 36
<212> PRT
<213> Chin. Hampster

<400> 20

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Gly Thr Leu Ala Arg Tyr Lys Phe Tyr Leu Ala Phe Glu Asn Ser Leu
 1               5                  10                  15
His Pro Asp Tyr Ile Thr Glu Lys Leu Trp Lys Asn Ala Leu Glu Ala
            20                  25                  30
Trp Ala Val Pro
        35
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<210> 21
<211> 36
<212> PRT
<213> Homo sapiens

<400> 21

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Pro Thr Val Ala Gln Tyr Arg Phe Tyr Leu Ser Phe Glu Asn Ser Gln
 1               5                  10                  15
His Arg Asp Tyr Ile Thr Glu Lys Phe Trp Arg Asn Ala Leu Val Ala
            20                  25                  30
Gly Thr Val Pro
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<210> 22
<211> 36
<212> PRT
<213> Mouse

<400> 22

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Pro Thr Leu Ala Arg Tyr Arg Phe Tyr Leu Ala Phe Glu Asn Ser Gln
 1               5                  10                  15
His Arg Asp Tyr Ile Thr Glu Lys Phe Trp Arg Asn Ala Leu Ala Ala
            20                  25                  30
Gly Ala Val Pro
        35
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<210> 23
<211> 36
<212> PRT
<213> Homo sapiens

<400> 23

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 1               5                  10                  15
His Leu Asp Tyr Ile Thr Glu Lys Leu Trp Arg Asn Ala Leu Leu Ala
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20 25 30
Gly Ala Val Pro
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<210> 24
<211> 36
<212> PRT
<213> Mouse

<400> 24
His Thr Val Ala Arg Tyr Lys Phe Tyr Leu Ala Phe Glu Asn Ser Arg
1 5 10 15
His Val Asp Tyr Ile Thr Glu Lys Leu Trp Arg Asn Ala Phe Leu Ala
20 25 30
Gly Ala Val Pro
35

<210> 25
<211> 36
<212> PRT
<213> Rat

<400> 25
His Thr Val Ala Arg Tyr Lys Phe Tyr Leu Ala Phe Glu Asn Ser Gln
1 5 10 15
His Val Asp Tyr Asn Thr Glu Lys Leu Trp Arg Asn Ala Phe Leu Ala
20 25 30
Gly Ala Val Pro
35

<210> 26
<211> 36
<212> PRT
<213> Chicken

<400> 26
Lys Thr Val Ser Ala Tyr Lys Phe Tyr Leu Ala Phe Glu Asn Ser Gln
1 5 10 15
His Thr Asp Tyr Ile Thr Glu Lys Leu Trp Lys Asn Ala Phe Ala Ala
20 25 30
Ser Ala Val Pro
35

<210> 27
<211> 35
<212> PRT
<213> Mouse

<400> 27
Pro Thr Ile Ser Thr Cys Lys Phe Tyr Leu Ser Phe Glu Asn Ser Ile
1 5 10 15
His Lys Asp Tyr Ile Thr Glu Lys Leu Tyr Asn Ala Phe Leu Ala Gly
20 25 30
Ser Val Pro

35

<210> 28
<211> 35
<212> PRT
<213> Dictyostelium discoideum

<400> 28
Asp Val Leu Lys Arg Tyr Asn Phe Ala Ile Ala Phe Glu Asn Ser Leu
1 5 10 15
Cys Lys Asp Tyr Ile Thr Glu Lys Leu Trp Glu Ser Leu Ser Val Gly
20 25 30
Thr Ile Pro
35

<210> 29
<211> 35
<212> PRT
<213> Helicobacter pylori

<400> 29
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1 5 10 15
Gly Tyr Gly Tyr Val Thr Glu Lys Ile Leu Asp Ala Tyr Phe Ser His
20 25 30
Thr Ile Pro
35

<210> 30
<211> 35
<212> PRT
<213> Helicobacter pylori

<400> 30
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1 5 10 15
Gly Tyr Gly Tyr Val Thr Glu Lys Ile Ile Asp Ala Tyr Phe Ser His
20 25 30
Thr Ile Pro
35

<210> 31
<211> 36
<212> PRT
<213> Caenorhabditis elegans

<400> 31
Met Leu Asp Thr Asp Tyr His Phe Tyr Val Thr Phe Glu Asn Ser Ile
1 5 10 15
Cys Glu Asp Tyr Val Thr Glu Lys Leu Trp Lys Ser Gly Tyr Gln Asn
20 25 30
Thr Ile Ile Pro
35

Filed